## ROUTING PROTOCOL BASED REDUNDANCY DESIGN FOR SHARED-ACCESS NETWORKS

## ABSTRACT OF THE DISCLOSURE

A protection CMTS is available to immediately service a cable modem should that modem's service from a working CMTS fail for any reason. To speed the service transfer (cutover) from the working CMTS to the protection CMTS, the cable modem may preregister with the protection CMTS well before the cutover becomes necessary. The cable modem's registration with both the working CMTS and the protection CMTS preferably employs a single IP address, so that the cable modem need not obtain a new IP address during cutover. While the cable modem may register with both the working CMTS and the protection CMTS, the devices are designed or configured so that only the working CMTS injects a host route for the cable modem into the appropriate routing protocol. Only after cutover to the protection CMTS does the protection CMTS inject its host route.

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